

Corporate Social Responsibility: Impact Assessment In The Aerospace Industry With Focus On Procurement Practices

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Abstract:

This paper examines the conceptualization of Corporate Social Responsibility (CSR) and the role of government in advancing social responsible practices, with focus on the procurement process in the aerospace industry. It intends to thoroughly review the literature on the subject and to provide insights for future research. The main contribution and significance of this paper lies in the fact that it forecasts a set of indicators that further improve the quality, value and extent of impact assessment for public procurement with a CSR approach in a particular industrial field: aerospace.

This paper is an output of a larger study on responsible public procurement in the aerospace sector in Argentina that concluded with a mix of indicators to measure social impact within that particular sector. The findings exposed hereby are part of the results obtained from an extensive research carried out over two years (2022 - 2023) in the context of a Postdoctoral Program ("Impacto de los proyectos tecnológicos del sector público en los sectores productivo, social y ambiental" - Facultad de Ciencias Económicas, Universidad Nacional de Córdoba / Instituto de Altos Estudios Espaciales Mario Gulich – CONAE/UNC).

The study is based on an analysis of the purchasing policy implemented by the two main entities in the aerospace industry in Argentina. On one hand, the Argentine aircraft factory (Fábrica Argentina de Aviones "Brig. San Martín" S.A. - FAdA), a central state-owned company in the national aeronautical industry that provides means and services to both the public sector (Defense and Security) and the private sector. On the other hand, the Argentine space activities commission (Comisión Nacional de Actividades Espaciales - CONAE), the government agency in charge of the national space programme.

On the basis of the analysis of the theoretical and legal frameworks, the examination of procurement policies, and the characteristics of the aerospace sector (expectations, priorities and needs), it was possible to come up with a list of indicators on CSR (in relation with procurement practices) specially tailored to the aerospace industry in Argentina.

Key Words:, Corporate Social Responsibility, Aerospace, Procurement

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I. Introduction

In recent decades, the interest in Corporate Social Responsibility (CSR) has greatly increased around the world and it is subject to wide debate. There is more and more concern and participation of societies in social and environmental issues which makes CSR planning (design, implementation, communication, assessment) a dynamic task and an actual challenge. The complexities increase as we note the multiple facets and features around the subject (types of organizations, stakeholder approaches, locations, economic sector, frameworks of reference, and many more).

In this paper we intend to present the results of a research conducted in Argentina in 2022 - 2023, that would provide some insights to the debate and some tools to address the challenging task. The following analysis would look into the concept of Corporate Social Responsibility (CSR) and the role of government in advancing responsible practices with focus on the procurement process in the aerospace industry. As mentioned above, this paper is an output of a larger study on responsible public procurement in the aerospace sector in Argentina that concluded with a mix of indicators to measure social impact in that particular sector.

To overview the research design and objectives, Section II refers to research methodology. The ultimate goal and the aim of the study is to provide indicators that enable impact assessment in terms of CSR in the aerospace industry, with focus on the public procurement policy.

Assessing impacts with a socially responsible approach, notably for public sector organizations (government, state-owned companies, etc.) has great significance as it helps to improve the chances to conduct an objective and more complete analysis of policies and to optimize performance. Therefore, a key aspect would be to choose the most appropriate tools to carry out the assessment, and that means, in the case of study,

to look for the right indicators to measure impacts in the chosen industrial sector, in relation to procurement practices.

To better understand the state-of-the-art, Section III addresses the background review. It consolidates the exhaustive literature examination held during the period of research, and the analysis of the most relevant theoretical and legal frameworks of reference, focusing on the most significant academic literature and historical events that have driven the evolution of CSR. This considers a wide number of referents, from the stakeholders theory (Freeman, 1984) up to the latest approaches that aim to design a strategic model that puts social responsibility in the core of any organization strategy (Dos Anjos and Calcini, 2022). The review also considers the main international frameworks, standards and guidelines issued by the world's top organizations, such as the Global Reporting Initiative (GRI). And for the purpose of this study, the focus has been made on procurement practices, looking into definitions, references and standards that could lead to the evaluation and measurement of impacts.

The background review also includes the contributions of the New Institutional Economics (Douglass North, Ronald Coase, Oliver Williamson), since we seek to analyze the role of the government in advancing social responsibility from that particular approach, especially with regard to its capacity to carry out the change in a sense of institutional transformation. In addition, the review of a large set of regulations (laws, standard instructions, etc.) is conducted. It includes Argentina's Administrative Law (with regard to procurement practices), general provisions and company's procurement standard practice instructions.

Sector IV outlines the major findings and results and, finally, Section V presents the conclusions, including a list of indicators for impact measurement.

II. Methodology

Research objectives:

General Objective (GO): To provide indicators that enable impact assessment in terms of Corporate Social Responsibility (CSR) in the aerospace industry, with focus on the public procurement policy.

Specific Objectives (SO):

- SO1: To analyze the concept and framework of CSR. In particular, in the procurement function.
- SO2: To examine the role played by the government in advancing CSR.
- SO3: To analyze the public procurement regime in Argentina, with consideration of particular provisions for the aerospace industry.
- SO4: To identify priority topics or fields that are addressed with a CSR approach and to look for useful ways to assess impact
- SO5: To develop a set of indicators for impact assessment with a CSR approach, in relation to procurement practices, for the aerospace sector.

Research design and methods:

The research design is cross-sectional. The analysis is based mainly on qualitative research techniques (King et al., 2000). To collect data, we proceeded to analyze secondary documents and conduct in-depth interviews with key experts from the academic, business and public fields. The analysis was held during a two-year period of research.

Legal research methodologies were also used (Alchourrón and Buligyn, 1974; Nino, 1984; Carrió, 1988), in order to develop a complete approach. The analysis of positive administrative law is necessary to carry out an analysis of current regulations on the subject and therefore the use of the appropriate methodology. This includes the assessment of national Argentine law (laws, decrees, etc.), as well as international guidelines and standards.

Also, the use of quantitative research techniques is required, to a very minor extent. Quantitative techniques are used only for the purposes of consolidating certain data of macroeconomic nature, whose sources are statistics or public reports.

The study is based on an analysis of the purchasing policy implemented by the two main entities in the aerospace industry in Argentina. On one hand, the Argentine Aircraft Factory (Fábrica Argentina de Aviones "Brig. San Martín" S.A. - FAdeA), a central state-owned company in the national aeronautical industry located in Córdoba, Argentina. The company's shareholders are the Ministry of Defense (with 99% of the shares) and Fabricaciones Militares Sociedad del Estado (with the remaining 1%). FAdeA develops, manufactures and carries out maintenance and modernization of civil and military aircraft, as well as production of aircraft parts. It has become an industrial development center, a referent in manufacturing for national defense and a supplier of technology and know-how, which makes the company a key player in the region, with international projection.

On the other hand, the Argentine space activities commission (Comisión Nacional de Actividades Espaciales - CONAE), the government agency in charge of the national space programme. It has signed different agreements with other space agencies (NASA and European agencies) and has developed a number of Earth Observation satellites, including SAC-A, SAC-B, SAC-C launched in 2000 and still operating, SAC D/Aquarius, and SAOCOM. Satellites are controlled from the Córdoba Earth Station facilities, located in the province of Córdoba, Argentina. More than 80 universities, entities, organizations and national companies participate in the projects and activities of this space programme.

The research was conducted between 2022 and 2023, in the context of a Postdoctoral Programme at the Facultad de Ciencias Económicas, Universidad Nacional de Córdoba.

III. Background

When referring to the concept of social responsibility we are calling up a complex idea that involves different aspects and dimensions. We can note there is a large number of definitions, from the simplest ones to the most complex, including an important range of terms and associated ideas, some of which are used interchangeably, and we will try to provide some conceptual clarifications.

In general terms, the notion of social responsibility aims to determine the economic, social and environmental responsibility of an organization towards its stakeholders. The standard ISO 26000 defines social responsibility as "the responsibility of an organization in relation to the impact of its decisions and activities on society and the environment, through transparent and ethical behavior that contributes to sustainable development; including the health and well-being of the society; takes into account the expectations of stakeholders; complies with applicable law while being consistent with international standards of behavior; is integrated throughout the organization and implemented in its relationships" (ISO, 2010).

This definition that we outline here is one of the many theoretical perspectives that have been developed to address the study of the social responsibility of organizations for decades. Some of the terms that are often used to refer to this idea are: Corporate Social Responsibility (CSR); Organizational Social Responsibility (OSR); Environmental, Social and Governance (ESG), more recently; Sustainability; and Green Management, just to mention a few. They have been used indistinctly quite frequently. We use the expression "CSR" here, understanding that it has become the most comprehensive term.

Reviewing the background, we shall point the following: Different approaches to corporate social performance or stakeholder management have been developed since the second half of the 20th century (Carroll, 1979; Freeman, 1984; Elkington, 1994; Donaldson & Preston, 1995). Only since 2000 has CSR been incorporated into organizations as a strategic element (Williams and Aguilera, 2008; Prados, 2015). It has been shown that respect for greater demands in terms of sustainable development by an organization has a positive effect on its productivity since there is a positive correlation between the social performance of organizations and their financial performance (Waddock and Graves, 1997), and although empirical studies have not found a simple link, the virtuous cycle hypothesis prevails. Therefore, CSR is consolidated as a source of competitive advantage and a protection tool in times of crisis, which provides greater financial stability to organizations that incorporate it into the core of their business strategy.

The most outstanding literature of recent years offers new perspectives in a way that it seeks to provide an ideal conceptual framework to carry out comparative studies (Matten, Moon, Siegel, Crane and McWilliams, 2009; Knudsen, Moon and Slager, 2015), as well as advancing on the analysis of the situation and projection of CSR in different countries (Aquino Alves, 2014), the challenges and opportunities that arise around this topic (Geloch-Viladegut, 2014) and gradually aiming to achieve the study of the link between CSR and public policies, integrating criteria of social responsibility and sustainability as a government strategy, among which open government policies stand out (López Egaña, 2014). The progress towards a broad model that exhaustively considers all aspects of management with CSR has been reinforced in recent years with the publication of collective, multidisciplinary works that address every aspect from labor relations, supply chain, urban mobility, carbon credit and compliance programs to facilitate the integration of these aspects to all public and private organizations (Dos Anjos and Calcini, 2022).

From the stakeholders' theory perspective (Freeman, 1984), among the various stakeholders that an organization has to address while settling a CSR strategy, we note the suppliers, and this is where a purchasing practice or a procurement policy gains particular interest. To what extent organizations actually integrate CSR in their procurement processes, in a specific system or market? What impact does it have in the system and how can we assess that impact?

While considering these questions, more questions arose. In order to analyze a system structure it is necessary to analyze their key actors. What/Who are the key actors? Is the government a key actor? To answer these questions we refer to the approach of the New Institutional Economics (Douglass North, Ronald Coase, Oliver Williamson as main references), and from that approach we analyze the role of government especially with regard to its capacity to carry out the change, in the sense of development, or institutional transformation.

In the public procurement process, the government (or the state, in the larger sense as a polity) is capable of generating positive externalities within the private sector companies that contract with it, which translate into the development of incentive structures and ideologies within these companies, which advances the implementation of CSR behaviors.

Thanks to the increased profitability resulting from the institutional implementation of CSR, the dominant organizations in the market, an “elite” of organizations, will impose their principles and practices on the rest of the market actors. Douglass North had already pointed out in this regard that "institutional innovation will come from the leaders... revolutions will be palace revolutions carried out by leaders or by a rival leader or by a small elite group" (North, 1981, p. 32). That means that the principles and practices of CSR will not be developed or adopted spontaneously by organizations but to the extent that the dominant organizations in the market find it interesting to impose their particular conception on the quality of CSR (in a sense of industrial economy).

The dominant organizations (the elite) are, as far as the purchasing function is concerned, the state and its first-tier suppliers. The state, which represents between 30% and 50% of the total purchases of the economic system in most countries (Government Expenditure / % GDP), and its first-tier suppliers are in a dominant position and with the capacity, by the sole exercise of its purchasing function, to induce the principles and practices of CSR effectively to the rest of the economic agents. General government expenditures amounted 46.3% of GDP on average across OECD’s countries in 2021 (OECD, 2023). The ratio of government expenditure to gross domestic product (GDP) in Argentina in 2022, according to the International Monetary Fund, amounted to 37.3% (IMF, 2024). Considering the three levels of government in the country (Nation, Provinces and Cities) total government expenditure over the last decade (evolution of expenditure / GDP), it easily exceeds 40% according to Argentina’s Ministry of Economy (Ministerio de Economía, 2021).

So, the state plays a key role and the analysis of the state in advancing CSR must be held, with focus on public procurement.

Once agreed that if an organization wants to be successful and achieve development (not only in terms of economic growth but also in a sense of sustainability in the long term), the CSR appears to be a useful tool; and given the state (government, public sector) is a key economic agent, it is a matter of how to advance sustainable development by leveraging CSR. Fortunately, international frameworks of reference are available to help tackle the task..

In order to fulfill the expectations of organizations and stakeholders and to provide tools that enable the most efficient and effective achievement of CSR goals, there are certain international frameworks that provide guidelines at a global level, to organizations of all kinds - public and private - and of all sizes -, small and large businesses. The most recognized international frameworks of reference, such as the Global Reporting Initiative (GRI) and the International Standard Organization (ISO), provide the world's most widely used sustainability reporting standards and guidelines, which cover a wide range of topics for the purpose of helping businesses and other organizations to take responsibility for their impacts by providing them with a global common language to communicate those impacts.

In this point, global trends reveal the increased use of very specific sector standards, other than the “universal” ones. The Global Reporting Initiative (GRI), a leading organization in this matter which sets globally accepted standards for sustainability reporting, has recently launched the GRI Sector Program: for oil and gas, coal, agriculture and mining sectors. Aerospace is on the list of 40 sectors that GRI is planning to work on, although it is not yet considered a “priority sector” (GRI, 2019). Nevertheless, the trends are clear: Aerospace is defined as a high-impact sector, the standards for each particular sector are being outlined and the availability of impact assessment tools is certainly highly desired.

GRI’s standards are designed as an easy-to-use modular set, organized in three basic categories: Universal standards, topic standards and sector standards. Among them, we can find standards that advance evaluation of suppliers (social and environmental), parameters to manage the value chain in relation to sensitive CSR issues, such as child labor and forced labor, and some economic performance indicators (direct and indirect) focused on suppliers (GRI,2023). A full analysis of standards has been held during the course of the two-year research. A wide set of standards have been identified in relation to each CSR dimension (social, economic and environmental). Only a few make explicit reference to procurement practices. The indicators retained by reason of relevance to procurement practice are detailed in Table N°1.

Table N° 1: Relevant GRI standards to public procurement process

| GRI standard | Topic | Description |
|--------------|---------------------------|---|
| GRI 203 | Indirect economic impacts | This Standard addresses an organization’s indirect economic impacts, including impacts of an organization’s infrastructure investments and services supported. Indirect economic impacts (monetary or non-monetary) are particularly important to assess in |

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|---------|-----------------------------------|---|
| | | relation to local communities and regional economies. |
| GRI 204 | Procurement practices | This covers an organization's support for local suppliers. By supporting local suppliers, an organization can indirectly attract additional investment to the local economy. It also covers how the organization's procurement practices cause or contribute to negative impacts in the supply chain. |
| GRI 205 | Anti-corruption | Corruption is broadly linked to negative impacts, such as poverty in transition economies, damage to the environment, abuse of human rights, abuse of democracy, and undermining the rule of law. Organizations are expected to demonstrate their adherence to responsible business practices. |
| GRI 308 | Supplier environmental assessment | An organization may be involved with negative environmental impacts either through its own activities or as a result of its business relationships with other parties. Due diligence is expected of an organization in order to prevent, mitigate, and address actual and potential negative environmental impacts in the supply chain. |
| GRI 408 | Child labor | Abolishing child labor is a key principle and objective of major human rights instruments and legislation, and is the subject of national legislation in almost all countries. Due diligence is expected of an organization in order to prevent and combat all forms of child labor in its activities, and to avoid contributing to or becoming linked to the use of child labor through its relationships with others (e.g., suppliers). |
| GRI 409 | Forced or compulsory labor | Not to be subjected to forced or compulsory labor is a fundamental human right. Due diligence is expected of an organization in order to prevent and combat all forms of forced or compulsory labor in its activities. It is also expected to avoid contributing to or becoming linked to the use of forced or compulsory labor through its relationships with others (e.g., suppliers). |
| GRI 414 | Supplier social assessment | An organization may be involved with negative social impacts either through its own activities or as a result of its business relationships with other parties. Due diligence is expected of an organization in order to prevent, mitigate, and address actual and potential negative social impacts in the supply chain. Suppliers can be assessed for a range of social criteria, including human rights (such as child labor and forced or compulsory labor); employment practices; health and safety practices; industrial relations; ; wages and compensation; and working conditions. |

It is important to make another special consideration and review when analyzing public procurement practices. The way in which the public sector deals with processes and practices is subject to very precise legal provisions. Hence, it is imperative to analyze the legal framework that refers to public procurement. In Argentina, the regulatory framework is rather extensive. The analysis took in consideration the full set of laws. To have an approach to what the general frame represents, the most significant rules are presented in Table N° 2. Each law is referenced by type, number and year; a description and main contributions are also detailed.

Table N° 2: Argentina's legal framework for public procurement

| Rule Type, Number and Year | Description | Main considerations |
|--|---|--|
| Decreto-Ley (Decree-Law) N° 23354 (1956) | " <i>Ley de Contabilidad y Organización del Tribunal de Cuentas de la Nación y de la Contaduría General de la Nación</i> ". It organizes and updates government accounting. | Chapter VI provides the legal framework for public procurement. |
| Decree N° 5720 (1972) | " <i>Ley de Contabilidad</i> ". It regulates Chapter VI, Decree-Law 23354. | It regulates the tendering process, suppliers registration, offer characteristics, and procedural aspects. |
| Law N° 24156 (1992) | " <i>Ley de Administración Financiera y Control del Sector Público Nacional</i> ". It derogates | The Congress is requested to pass a law that establishes a new system for |

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|-----------------------|---|---|
| | Decree-Law 23354 but keeps Chapter VI in force. | public contracting. |
| Decree N° 436 (2000) | “ <i>Contrataciones del Estado</i> ”. It provides the basis for the new public procurement scheme. | It provides detailed reglamentation in relation to proceedings, suppliers, offer, adjusting and updating the legal framework |
| Decree N° 1023 (2001) | “ <i>Régimen de Contrataciones de la Administración Nacional</i> ”. It establishes the general regime for public procurement. | It enables electronic public contracting, eliminates certain special regimes, introduces CSR criteria - transparency and anti-corruption (Articles 9 and 10). It refers to every aspect of procurement: suppliers, offer, procedures. |
| Decree N° 893 (2012) | “ <i>Régimen de Contrataciones de la Administración Nacional - Reglamentación</i> ”. | It establishes the regulations implementing Decree 1023/2001. |
| Decree N° 1030 (2016) | “ <i>Régimen de Contrataciones de la Administración Nacional - Reglamentación</i> ”.. | It derogates Decree 893/2012 and establishes the new regulations implementing Decree 1023/2001 |

Other significant rules that are worth mentioning because they complement the general framework are the “Ministry dispositions” (executive provisions) and “Office communications” (provisions issued by the enforcement office in relation to public procurement, the *Oficina Nacional de Contrataciones - ONC*). In relation to sustainable procurement, it outstands the ONC’s handbook issued in 2017 (*Manual de compras públicas sustentables*).

After thoroughly considering the legal provisions, we note that the inclusion of CSR criteria for public procurement is absolutely compatible with legal requirements. No obstacles or prohibitions are foreseen. In fact, many CSR initiatives align with and also complement regulatory provisions.

When specifically considering the aerospace sector, a complex of applicable regulations is observed, where not only general regulations converge, but also particular requirements are established.

In order to limit the analysis to the research objective, we proceeded to analyze the most relevant rules and guidelines related to the purchasing process.

In relation with the Argentine Aircraft Factory, FAdA, the company has identified a set of standards that cannot be unknown to the company members or to the suppliers who wish to contract with it. These standards specifically refer to aspects of responsible purchasing, that is, acquisition practices with social responsibility content, in the sector. To carry out this analysis, the standards which FAdA works with its suppliers are taken into account. These include: the Contracting Regulations - the company's Standard Practice Instructions (IPE) and related documents -, the company's Code of Conduct and its Integrity Program. The company also has a Sustainability Plan, which puts out the topics or directions in which the company considers valuable to work on.

Regarding the Contracting Regulations, the following stand out: Procurement Standard Practice Instructions (IPE) - Number 05.001 to 05.007 - (Rev. B) dated 12/13/2021; and the following related documents:

- ISO 9001
- SAE AS9100
- Manual de la Calidad
- Manual MASH
- IPE 18.004 - *Egresos por Caja Chica y Fondos Fijos*
- IPE 18.007 - *Facturación y Cobranza*
- IPE 18.005 - *Activos Fijos*
- IPE 18.003 - *Procedimiento de liquidación y pago a proveedores y otros*
- IPE 18.006 - *Presupuesto*
- IPE 05.006 - *Catalogación de Materiales*
- IPE 01.013 - *Celebración y seguimiento de contratos*
- NPF/LOG/001 - *Requisitos Generales de Calidad para Proveedores*
- NPF/LOG/009 - *Gestión de Compras*
- NPF/LOG/024 - *Selección, evaluación y calificación de Proveedores*

In relation with CONAE, the Argentine Space Commission, we note the “Plan Nacional Espacial” (Argentine Space Plan) is the primary program that provides the general framework for the Argentine space

policy. Every initiative must be aligned with the national space plan, in every aspect. It is important to note that in addition to the applicable Argentine regulations, the analysis of norms and policies developed by the main international financing organizations for space projects (Inter-American Development Bank -IDB- and World Bank - IBRD) and by the main space agencies with which the CONAE develops projects in collaboration (NASA and ESA) becomes relevant. The most significant provisions are presented in Table N° 3, referenced by rule, description and main contributions.

Table N° 3: Significant procurement provisions - Space

| Rule | Description | Main contributions |
|---|--|---|
| Decree N° 2670 (1994) | <i>“Plan Espacial Nacional”</i> | It establishes the Argentine Space Plan |
| GN-2349-15 | <i>“Políticas para la Adquisición de Bienes y Obras Financiadas por el Banco Interamericano de Desarrollo”</i> | It provides detailed reglamentation in relation to proceedings, suppliers, offer, adjusting regarding BID financed programs |
| IF-2019-68464597-APN-DNCOPRYFC#JGM | <i>“Pliego único de bases y condiciones generales para las contrataciones de obras públicas”</i> | It establishes the proceedings in procurements regulated by the art. 8° of Lawy N° 24.156, |
| NPR 8530.1B | <i>“NASA Sustainable Acquisition”</i> | NASA procedural requirements |
| FAR 23.4 | <i>“Federal Acquisition Regulations”</i> | It establishes the regulations on use of recovered materials and biobased products |
| Section 6002 (40 CFR 247) | <i>“Resource Conservation and Recovery Act (RCRA)”</i> | It establishes comprehensive procurement guidelines for products containing recovered materials |
| PART 1823—ENVIRONMENT, ENERGY AND WATER EFFICIENCY, RENEWABLE ENERGY TECHNOLOGIES, OCCUPATIONAL SAFETY, AND DRUG-FREE WORKPLACE | <i>“NASA Federal Acquisition Regulation Supplement”</i> | This section sets sets forth NASA requirements for mandatory drug and alcohol testing of certain contractor personnel under section 203, National Aeronautics and Space Act of 1958, as amended, 42 U.S.C. 2473, 72 Stat. 429; and Civil Space Employee Testing Act of 1991, Public Law 102-195, sec. 21, 105 Stat. 1616 to 1619. |
| FAR 23.403-4 | <i>“Agency policy applicable to DOE's facility management contractors”</i> | Preference must be given to products containing recycled content, or biobased content if they meet the cost and performance criteria, unless the item cannot be acquired (i) Competitively within a reasonable time frame; (ii) Meeting reasonable performance standards; or (iii) At a reasonable price. |
| ESA/REG/001 | <i>“ESA Procurement Regulations and related Implementing Instructions”</i> | It establishes the procurement process at ESA |

In addition, a number of sector initiatives have been identified in regard with CSR criterion on procurement. The most outstanding is the local suppliers development programme, which consists in transitioning from imported materials or components to local ones, with the objective of “nationalizing” suppliers (De la Vega, 2020; Ministerio de Defensa, 2020). In other words, replacing suppliers of imported components with national components. The aim of this policy is to promote local economies, to help develop local jobs and to reinforce the national industry.

IV. Research Findings And Results

Corporate Social Responsibility (CSR) is consolidated as a source of competitive advantage and a protection tool in times of crisis, which provides greater stability to organizations that integrate a CSR approach into the core of their strategy, whether it is a private or a public sector organization.

Thanks to the increased profitability resulting from the institutional implementation of CSR, the dominant organizations in the market, an “elite” of organizations, will impose their principles and practices on

the rest of the market actors. That means that the principles and practices of CSR will not be developed or adopted spontaneously by organizations but to the extent that the dominant organizations in the market find it interesting to impose their particular conception of CSR. The dominant organizations are, in terms of purchasing function, the state (in the sense of government or public sector) and its first-tier suppliers. Given the relationship between government expenditure and Gross Domestic Product (GDP), the state shows up as a most relevant player in the market, holding a dominant position.

As a result, it is possible to advance CSR through public policies, in particular in relation to procurement practices in the aerospace industry. There is a solid theoretical background to support it and a legal framework that offers viability. Moreover, we note that the inclusion of CSR criteria for public procurement is absolutely compatible with legal requirements. Many CSR initiatives align with and also complement regulatory provisions.

Among the expectations and priorities that have been identified in the aerospace industry, we note: When considering FAdeA's strategic vision, there is a strong emphasis on sustainability. The company's vision is to be the "flagship company" of the Argentine aeronautical industry, with sustainable growth (FAdeA, 2023). This idea is launched to the different company's functional areas (including operations and purchasing, within the company's organizational chart), and translates into commitments assumed in terms of integrity, transparency, ethics and so on, with specific action programs, which are essentially managed with a CSR approach and communicated to stakeholders in accordance with the company's own standards. A large number of areas have been certified following global standards (quality, management, production, security, etc.) However, on the issue of CSR practices, these are not measured according to a uniform global standard - in accordance with the international reference frameworks noted in the background review, e.g. GRI standards -, so the communication in terms of CSR could have a limited scope. At least, more limited than if globally recognized standards were used, with criteria that the international community manages and understands (especially given the company's projection to international markets and keeping in mind that standardized impact assessment would become uniform practice in the near future, as trends indicate).

Another aspect to highlight is that, among the sector initiatives, we note a strong emphasis in promoting local suppliers development. This is an action on going but not assessed by a global standard.

In a similar way, CONAE's strategic mission grants to "promote the development of the national industry, promoting the growth and creation of new companies that create innovative technologies, expanding their scope of participation internationally, with the contribution of high added value in their supply chain". No explicit reference is made to the CSR approach, although it is implied from the statement, by the topic addressed (in relation to economic impacts, in particular with regard to local communities development and regional economies).

Also, significant efforts have been made in the aerospace sector over advancing ethics and transparency, notably in relation to different stages of the procurement process. Further initiatives refer to: internship programs and education programs, to provide training and career development opportunities to young people; actions to ensure sustainable production, e.g. use of business intelligence; numerous cooperation agreements with key stakeholders (private partners, other government organizations, universities, foreign partners, etc.); and international certification standards (many international certifications already earned in relation to quality systems, security, management, etc.).

V. Conclusions

Based on the results obtained, we can have a better understanding of the theoretical assumptions of CSR in the public sector. In particular, in relation to government's suppliers in the aerospace industry. We can also note the efforts to assess impact and the priorities in terms of development. We can now forecast a set of indicators that aim to provide some insight and advance impact assessment. However, it is important to note that the proposed indicators are exclusively limited to the measurement of impacts around procurement practices (acquisitions, link with suppliers). Therefore, the need to go further in the development of additional and complementary parameters remains pending to fully address the issue of CSR in the aerospace sector, from all CSR aspects/dimensions (economic, social and environmental) and addressing all stakeholders (customers, employees, shareholders, local communities, not just suppliers). A comprehensive consideration might facilitate better integration of CSR practices within the organization.

The implementation of sustainability and social responsibility programs and actions in the field of public procurement in the aerospace sector is noted. Among the responsible purchasing practices of the examined government entities, the development of local suppliers stands out. This action is the result of a public policy, a will (that is, above all, the decision to promote the local industry and facilitate the development of national suppliers to the largest extent) and is also the result of an evolution and maturation of the sustainability policy.

By making a link between the observed practices on public responsible purchasing in the aerospace sector and the available impact measurement frameworks and standards, it has been possible to determine the relevance of using certain uniform and widely accepted criteria.

We hereby propose a set of nine (9) indicators that cover economic, social and environmental aspects. These indicators are extracted from GRI (2023). The decision to take the GRI standards as a reference is based on the relevance and recognition that these standards detain at a global level, the trends towards uniform standardization, and the importance for the Argentine aerospace sector given its presence in international markets.

It has been announced that, within its standards development program, GRI plans to launch a set of sector parameters on the “Aerospace and Defense” sector, so the indicators proposed here will give some kind of anticipation and help aerospace organizations get ready for the coming years and start adapting in terms of practices and indicators that in the near future will be recommended for all companies.

The following table (Table N° 4) presents a synthesis of the suggested indicators, organized by: Theme, Sub-theme, Impact Indicator recommendation, and GRI reference standard. Note that in relation to the CSR dimensions, the indicators are linked to its three fundamental aspects or pillars, thus: Economic aspects, indicators 1 - 3; Social aspects, indicators 4 - 7; Environmental aspects, indicators 8 and 9.

Table N° 4: Impact assessment indicators

| Theme | Sub-theme | Impact indicator | GRI reference standard |
|------------------------|-----------------------------------|---|-----------------------------------|
| Procurement practices | Direct economic impacts | 1) Proportion of spending on local suppliers | Disclosure 204-1 |
| | Indirect economic impacts | 2) Significant indirect economic impacts | Disclosure 203-2 |
| | Anti-corruption | 3) Anti-corruption | Disclosure 205-1, 205-2 and 205-3 |
| Labor in supply chains | Forced or compulsory labor | 4) Operations and suppliers at significant risk for incidents of forced or compulsory labor | Disclosure 409-1 |
| | Child labor | 5) Operations and suppliers at significant risk for incidents of child labor | Disclosure 408-1 |
| Supplier assessment | Supplier social assessment | 6) New suppliers that were screened under social criteria | Disclosure 414-1 |
| | | 7) Negative social impacts in the supply chain and actions taken | Disclosure 414-2 |
| | Supplier environmental assessment | 8) New suppliers that were screened under environmental criteria | Disclosure 308-1 |
| | | 9) Negative environmental impacts in the supply chain and actions taken | Disclosure 308-2 |

Clarifications, by indicator:

- 1) Proportion of spending on local suppliers: It is required to identify the percentage of the procurement budget used for significant locations of operation that is spent on suppliers local to that operation (and to define “local” criteria as well as “significant operation”). In the aerospace industry the development of local suppliers is a high priority. Even if this impact is assessed for certain specific projects, e.g. FAdA’s PAMPA III Project (De la Vega, 2020), a global standard is not used. It is important to assess this impact given the strong need to give support to local economies in Argentina, to reinforce not only the industry but particularly the workforce, seeking to generate more and better jobs, and generate added value. To use an indicator that can be used to communicate globally is a must.
- 2) Significant indirect economic impacts: It concerns the impacts that an organization’s infrastructure investments and services supported have on its stakeholders and the economic system. It helps to have a

dimension of impacts in local communities. It means to identify examples of significant indirect economic impacts (positive and negative) and weigh the indirect economic impacts identified in the context of external benchmarks and stakeholder priorities (such as national or international protocols, standards and political agenda). E.g., the number of jobs supported in the supply chain (employment impacts on suppliers as a result of organizational growth or downsizing); variation of the pattern of foreign direct investments, when the organization modifies its infrastructure and/or practices generating changes (promotion or decrease) in direct investments in the region/ geographic location.

- 3) Anti-corruption: It requires to identify practices such as bribery, facilitation payments, fraud, extortion, collusion, and money laundering; the offer or receipt of gifts, loans, fees, rewards, or other advantages as an inducement to do something that is dishonest, illegal, or represents a breach of trust. Corruption is a major worry in Argentina, according to Transparency International's 2023 Corruption Perceptions Index, Argentina scored 37 out of 100 points ("highly corrupt"), ranking 98th out of 180 countries. To prevent corruption, the organization should carry out the following: to implement risk assessment related to corruption across the organization, in particular in relation with the procurement process; to implement communication and training about anti-corruption policies and procedures, to build the internal and external awareness and the necessary capacity to combat corruption; and to identify actions taken in case of a confirmed incident of corruption.
- 4) Operations and suppliers at significant risk for incidents of forced or compulsory labor: It requires identifying operations and suppliers that are at significant risk of forced or compulsory labor (by type of operation, such as a manufacturing plant; by supplier; by geographic areas, such as areas considered to be at risk). Also, to detail measures adopted by the organization in the reporting period to contribute to the abolition of such practices (such as awareness-raising, training, surveillance, etc.). It helps active human rights protection. Informal economy in Argentina, and informal work rates are high and grow exponentially during periods of economic crisis. The assessment of risk incidents of this nature is also a way to bring workers and economic units under formal arrangements.
- 5) Operations and suppliers at significant risk for incidents of child labor: It requires identifying operations and suppliers that are at significant risk of child labor (by type of operation, such as a manufacturing plant; by supplier; by geographic areas, such as areas considered to be at risk). Also, to detail measures adopted by the organization in the reporting period to contribute to the abolition of such practices (such as awareness-raising, training, surveillance, etc.). Human rights basics. Protection of children is a common concern. According to recent statistics produced by the Barómetro de la Deuda Social de la Infancia ("Childhood Social Debt Barometer") of the Universidad Católica Argentina (UCA), child labour in intensive domestic activities and the market affects nearly 15 percent of the population aged 5 to 17 in Argentina.
- 6) New suppliers that were screened under social criteria: It means to identify the percentage of new suppliers evaluated and selected according to social criteria (such as the implementation of due diligence processes for social impacts when contracting suppliers). Aerospace industry is currently seeking to enlarge its international presence, looking to improve the performance in a way that enables the increase of the country's foreign reserves (balance of payment accounts). Thus, suppliers social assessment is expected by potential customers globally, and communicating this impact in a way that is usually accepted is highly desired.
- 7) Negative social impacts in the supply chain and actions taken: Requirements to apply this indicator: To report the number of suppliers identified as suppliers at risk of potential or actual negative impacts; to report percentage of suppliers with significant negative social impacts with whom improvements have been agreed as a result of an evaluation; and to report the percentage of suppliers with significant negative social impacts with whom the relationship has been terminated as a result of the evaluation, indicating the reason. This indicator complements the previous one (indicator n° 6). It adds strength and abidance to suppliers' social assessment.
- 8) New suppliers that were screened under environmental criteria: It means to identify the percentage of new suppliers evaluated and selected according to environmental criteria (such as the implementation of due diligence processes for environmental impacts when contracting suppliers). This aspect is especially important to local communities where the company operates. Environmental impacts of one particular sector may affect other economic activities. In this case, the entities (FAdeA and CONAE's facilities) are located in the Province of Córdoba (Argentina), where tourism is a major industry. Many visitors go to the Province from different points of the country and from foreign countries too. Sustainability is a key factor in strategic planning in that economic sector. To focus on environmental impacts in this matter is a priority.
- 9) Negative environmental impacts in the supply chain and actions taken: This indicator informs stakeholders about an organization's awareness of significant actual and potential negative environmental impacts in the supply chain. Suppliers can be assessed for a range of environmental criteria such as impacts related to energy, water, or emissions. Requirements to apply this indicator: To report the number of suppliers identified as suppliers at risk of potential or actual negative impacts; to report percentage of suppliers with significant negative environmental impacts with whom improvements have been agreed as a result of an

evaluation; and to report the percentage of suppliers with significant negative environmental impacts with whom the relationship has been terminated as a result of the evaluation, indicating the reason. This indicator complements the previous one (indicator n° 8).

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